



Caltech: Using our IR with Campus Research Groups

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Digital Initiatives Symposium
University of San Diego
April 9, 2014



Our IR

- Began in 2001 on the Eprints platform
 - Scope has evolved
 - Originally a belief that if we built it, people would use it
 - Next, a focus on OA
 - Eventually, 2008 Faculty Board directive
 - Document the campus' research output
 - Now 13 years old and 37K records
-



Who Does the Work?

- Library staff
 - Weekly harvests from WoS, arXiv, Medline, SciFinder, MathSciNet
 - Campus staff
 - Trained as depositors
 - Simple and advanced deposits
 - Reviewed and released by librarians and library staff according to SHERPA-RoMEO
-



Next Steps

- Groups at Caltech
 - Recognition of growing number of centers on campus being funded by government or foundations
 - Funders require demonstration of ROI and/or annual reports
 - Cross-disciplinary research
 - Field-specific repositories can't meet need
 - Multiple funding sources
 - Authors may have 300 publications, but only 6 with group affiliation
-



Caltech Library

Yanbei Chen article *

★ Journal or Publication Title:	Journal of Physics B: Atomic, Molecular and Optical Physics			?
ISSN:	0953-4075			?
Publisher:	Institute of Physics			?
Volume:	46			?
Issue or Number:	10			?
Page Range:	Art. No. 10 to			?
Date:	Year: 2013	Month: May	Day: 28	?
Date Type:	<input type="radio"/> UNSPECIFIED <input checked="" type="radio"/> Publication <input type="radio"/> Submission for publication <input type="radio"/> Completion			?
Group:	<div>1. IQIM</div> <div>2. Institute for Quantum Information and Matter</div> <div>3. Keck Institute for Space Studies</div> <div>4.</div> <div>5.</div> <div>More input rows</div>			?
★ Collection:	CaltechAUTHORS			?
★ Record Number:	CaltechAUTHORS:20130708-113425696			?
★ Persistent URL:	http://resolver.caltech.edu/CaltechAUTHORS:20130708-113425696			?
Related URLs:	URL	URL Type	Description	?
	http://arxiv.org/abs/1302.1924	arXiv		
	http://dx.doi.org/10.1088/0953-4075/46/10/104	DOI		
	http://iopscience.iop.org/0953-4075/46/10/104	Publisher		
		UNSPECIFIED		
		UNSPECIFIED		
	More input rows			



Engage with Campus

- Outreach
 - Multiple visits
 - Meet with groups in their environments
 - IQIM, CaltechTheory, TAPIR, KNI, SRL, KISS, Resnick Sustainability Institute, CMS@Caltech, CCI Solar Fuels
 - Provide groups with JavaScript and PHP code to generate group publication lists
 - Allow groups to tailor their publication lists to their websites with CSS
-



Divisions

- Caltech has 6 academic divisions
 - BBE, CCE, EAS, GPS, HSS, PMA
 - Development encouraging divisions to update their websites
 - Often faculty publication lists are outdated
 - Outreach to BBE and HSS
 - Both divisions now linking to CaltechAUTHORS
-



Caltech Library

Biology and Biological Engineering Division *

Caltech Division of Biology and Biological Engineering

Professorial Faculty

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What are you interested in?

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All Professorial Faculty

Ralph Adolphs radolphs@hss.caltech.edu

Bren Professor of Psychology and Neuroscience and Professor of Biology

Neuroscience




People Roles

- Professorial Faculty
- Affiliated Faculty
- Senior Research Associates
- Senior Research Fellows
- Emeritus Faculty

John M. Allman cebus@caltech.edu

Frank P. Hixon Professor of Neurobiology

Neuroscience




Research Areas

- Biochemistry, Structural, and
- Molecular Cell Biology
- Biological Engineering
- Developmental Biology and Genetics
- Microbiology and Immunology
- Neuroscience
- Systems Biology

Richard A. Andersen andersen@vis.caltech.edu

James G. Boswell Professor of Neuroscience

Neuroscience





TAPIR *



CALIFORNIA INSTITUTE OF TECHNOLOGY



TAPIR at Caltech

Theoretical AstroPhysics Including Relativity and Cosmology

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Recent Publications of TAPIR Group Members

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Number of items: **576**.

2013

Couch, Sean M. and Ott, Christian D. (2013) [Revival of the Stalled Core-collapse Supernova Shock Triggered by Precollapse Asphericity in the Progenitor Star](#). Astrophysical Journal Letters, 778 (1). Art. No. L7. ISSN 0004-637X. <http://resolver.caltech.edu/CaltechAUTHORS:20131223-075453787>

Galley, Chad R. and Porto, Rafael A. (2013) [Gravitational self-force in the ultra-relativistic limit: the "large-N" expansion](#). Journal of High Energy Physics, 2013 (11). Art. No. 96. ISSN 1029-8479. <http://resolver.caltech.edu/CaltechAUTHORS:20130305-143738143>

Zhang, Fan and Szilágyi, Béla (2013) [Joint approach for reducing eccentricity and spurious gravitational radiation in binary black hole initial data construction](#). Physical Review D, 88 (8). Art. No. 084033. ISSN 0556-2821. <http://resolver.caltech.edu/CaltechAUTHORS:20131125-072834366>

Reisswig, C. et al. (2013) [Formation and Coalescence of Cosmological Supermassive-Black-Hole Binaries in Supermassive-Star Collapse](#). Physical Review Letters, 111 (15). Art. No. 151101. ISSN 0031-9007. <http://resolver.caltech.edu/CaltechAUTHORS:20131106-100213472>

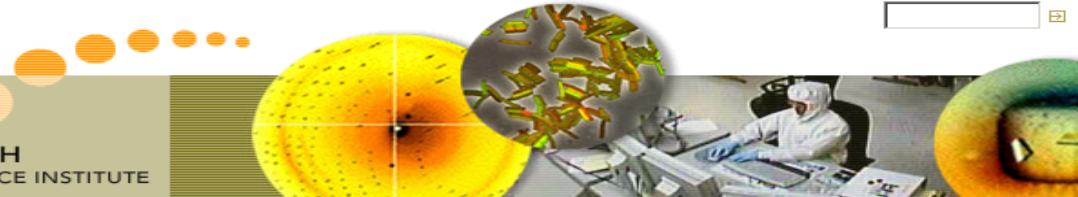
Tsang, David and Butsky, Iryna (2013) [Iron Line Variability of Discoseismic Corrugation Modes](#). Monthly Notices of the Royal Astronomical Society, 435 (1). pp. 749-765. ISSN 0035-8711. <http://resolver.caltech.edu/CaltechAUTHORS:20130805-080029527>

Rott, Carsten and Siegal-Gaskins, Jennifer M. and Beacom, John F. (2013) [New Sensitivity to Solar WIMP Annihilation using Low-Energy Neutrinos](#). Physical Review D, 88 (5). Art. No. 055005. ISSN 0556-2821. <http://resolver.caltech.edu/CaltechAUTHORS:20130117-105418827>

Hong, Ting et al. (2013) [Open quantum dynamics of single-photon optomechanical devices](#). Physical Review A, 88 (2). Art. No. 023812. ISSN 1050-2947. <http://resolver.caltech.edu/CaltechAUTHORS:20130320-151454253>



Kavli Nanoscience Institute *



kni
CALTECH
The KAVLI NANOSCIENCE INSTITUTE

**Research**
Nanobiotechnology
Nanophotonics
Large-Scale Integration of Nanosystems

Publications
Background Reading

search this site:

Publications

Jump to: [2014](#) | [2013](#) | [2012](#) | [2011](#) | [2010](#) | [2009](#) | [2008](#)
Number of items: **160**.

2014

Aitken, Zachary H. et al. (2014) *Grain Boundary Sliding in Aluminum Nano-Bi-Crystals Deformed at Room Temperature*. *Small*, 10 (1). pp. 100-108. ISSN 1613-6810. <http://resolver.caltech.edu/CaltechAUTHORS:20130726-075320969>

Li, Jiang and Lee, Hansuek and Vahala, Kerry J. (2014) *Low-noise Brillouin laser on a chip at 1064 nm*. *Optics Letters*, 39 (2). pp. 287-290. ISSN 0146-9592. <http://resolver.caltech.edu/CaltechAUTHORS:20140207-085658118>

2013

Lattimer, Judith R. C. et al. (2013) *Redox Properties of Mixed Methyl/Vinylferrocenyl Monolayers on Si(111) Surfaces*. *Journal of Physical Chemistry C*, 117 (51). pp. 27012-27022. ISSN 1932-7447. <http://resolver.caltech.edu/CaltechAUTHORS:20140206-113901424>

Pelton, Matthew et al. (2013) *Viscoelastic Flows in Simple Liquids Generated by Vibrating Nanostructures*. *Physical Review Letters*, 111 (24). Art. No. 244502. ISSN 0031-9007. <http://resolver.caltech.edu/CaltechAUTHORS:20140117-084526325>

Burgos, Stanley P. and Yokogawa, Sozo and Atwater, Harry A. (2013) *Color Imaging via Nearest Neighbor Hole Coupling in Plasmonic Color Filters Integrated onto a Complementary Metal-Oxide Semiconductor Image Sensor*. *ACS Nano*, 7 (11). pp. 10038-10047. ISSN 1936-0851. <http://resolver.caltech.edu/CaltechAUTHORS:20140113-095935034>

Pathak, Siddhartha and Raney, Jordan R. and Daraio, Chiara (2013) *Effect of morphology on the strain recovery of vertically aligned carbon nanotube arrays: An in situ study*. *Carbon*, 63. pp. 303-316. ISSN 0008-6223. <http://resolver.caltech.edu/CaltechAUTHORS:20131101-105544944>



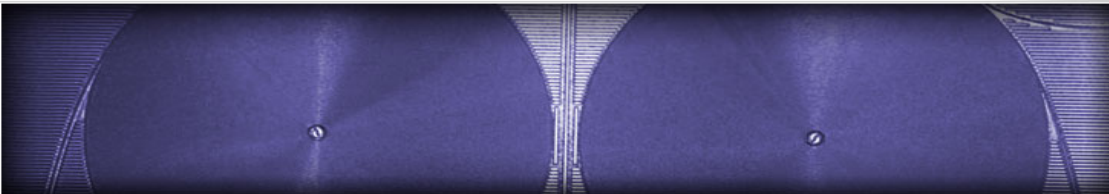
IQIM *

CALIFORNIA INSTITUTE OF TECHNOLOGY

IQIM

Institute for
Quantum Information and Matter

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Publications

All Caltech theses are indexed by author name through the [Caltech Library Thesis pages](#). For a list of theses completed by members of IQIM, please see the IQIM thesis page (currently under construction).

Jump to: [2014](#) | [2013](#) | [2012](#) | [2011](#) | [2010](#) | [2008](#)
Number of items: **176**.

2014

Yu, S.-P. et al. (2014) *Nanowire photonic crystal waveguides for single-atom trapping and strong light-matter interactions*. . (Submitted)<http://resolver.caltech.edu/CaltechAUTHORS:20140219-085856700>

Dengis, John and König, Robert and Pastawski, Fernando (2014) *An optimal dissipative encoder for the toric code*. New Journal of Physics, 16 . Art. No. 013023. ISSN 1367-2630. <http://resolver.caltech.edu/CaltechAUTHORS:20140228-100623385>

Li, Jiang and Lee, Hansuek and Vahala, Kerry J. (2014) *Low-noise Brillouin laser on a chip at 1064 nm*. Optics Letters, 39 (2). pp. 287-290. ISSN 0146-9592. <http://resolver.caltech.edu/CaltechAUTHORS:20140207-085658118>

Rey, A. M. et al. (2014) *Probing many-body interactions in an optical lattice clock*. Annals of Physics, 340 (1). pp. 311-351. ISSN 0003-4916. <http://resolver.caltech.edu/CaltechAUTHORS:20140211-101349722>



Opportunities and Challenges

- Theses
 - Identifying articles
 - Inconsistent acknowledgements
 - KISS instructions [*](#)
 - Up-to-date information
 - IPCP, IPAM, AOP – indexes
 - Harvesting not comprehensive
 - Non-CIT authors
 - JCAP, KNI, KISS, CCI Solar Fuels
 - Media Relations
 - PURLs not consistently used
-



Opportunities and Challenges, cont'd

- Amount of work
 - Time investment
 - Growing number of library staff involved
 - Backfile
 - Can import from arXiv, Medline, BibTeX
 - Service vs. cost recovery model
 - Appreciated service but challenge to keep in our budget
 - We look after copyright requirements
-



Thank you

- Kristin Buxton
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 - Betsy Coles
 - Tony Diaz
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 - Kathy Johnson
 - Christine Ngo
 - Ben Perez
 - Jason Perez
 - Ruth Sustaita
 - John Wade
 - Donna Wrublewski
-



Questions? Comments?

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CaltechAUTHORS

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